



JFW

Docket No.: TER-01P23380

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

By: 

Date: August 10, 2004

UNITED STATES IN THE PATENT AND TRADEMARK OFFICE

Applic. No. : 10/823,227
Applicant : Manfred Weigl
Filed : April 12, 2004
Title : Diaphragm Pump with Integrated Pressure Sensor
Art Unit : 3746
Examiner : to be assigned

Docket No. : TER-01P23380
Customer No. : 24131

LETTER

Hon. Commissioner for Patents

Sir:

Enclosed please find a copy of the English translation of the International Preliminary Examination Report for the above-identified application. Please enter it into the file.

Respectfully submitted,



For Applicant

WERNER H. STEMER
REG. NO. 34,956

Date: August 10, 2004

Lerner and Greenberg, P.A.
Post Office Box 2480
Hollywood, FL 33022-2480
Tel: (954) 925-1100
Fax: (954) 925-1101

/bmb

Translation

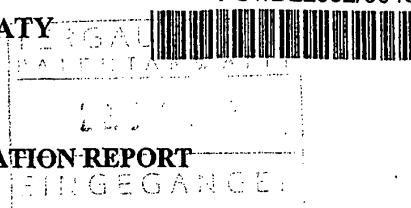
PATENT COOPERATION TREATY

PCT/DE2002/004379

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference 01P23380P-8/27	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/DE2002/004379	International filing date (day/month/year) 28 November 2002 (28.11.2002)	Priority date (day/month/year) 12 December 2001 (12.12.2001)
International Patent Classification (IPC) or national classification and IPC F04B 43/04		
Applicant ARGILLON GMBH		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 11 July 2003 (11.07.2003)	Date of completion of this report 01 October 2003 (01.10.2003)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DE2002/004379

I. Basis of the report

1. This report has been drawn on the basis of (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.):

- ☐ the international application as originally filed.
- ☒ the description, pages 1-13, as originally filed,
 pages _____, filed with the demand,
 pages _____, filed with the letter of _____,
 pages _____, filed with the letter of _____.
- ☒ the claims, Nos. 1-7, as originally filed,
 Nos. _____, as amended under Article 19,
 Nos. _____, filed with the demand,
 Nos. _____, filed with the letter of _____,
 Nos. _____, filed with the letter of _____.
- ☒ the drawings, sheets/fig 1/2-2/2, as originally filed,
 sheets/fig _____, filed with the demand,
 sheets/fig _____, filed with the letter of _____,
 sheets/fig _____, filed with the letter of _____.

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

4. Additional observations, if necessary:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/DE 02/04379

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-7	YES
	Claims		NO
Inventive step (IS)	Claims	1-7	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-7	YES
	Claims		NO

2. Citations and explanations

1. Reference is made to the following document:

D1: WO 01 57488 A (WEIGL MANFRED; SIEMENS AG (DE))
9 August 2001 (2001-08-09), cited in the
application

2. D1 is considered the prior art closest to the subject matter of claim 1. D1 discloses a pump for conveying fluid reducing agent, the pump having a pressure sensor which is not damaged should the pumped fluid freeze.

The problem addressed by the invention is that of designing a diaphragm pump that has an integrated pressure sensor and is also compact and prevents damage to the pressure sensor when the pumped fluid freezes.

This problem is solved in that the pressure sensor is arranged in the diaphragm pump housing and the pump is used as an expansion vessel for protecting the pressure sensor.

The above features cannot be derived from D1, so that the subject matter of claim 1 meets the novelty and inventive step requirements.

3. Dependent claims 2 to 7 concern advantageous configurations of the diaphragm pump as per claim 1. Therefore their subject matter is novel and is not rendered obvious by the cited prior art.
4. Independent claim 1 is not in the two-part form (PCT Rule 6.3(b)); however, in the present case, the two-part form would appear appropriate. Therefore the features known together from the prior art (D1) should be combined in the preamble (PCT Rule 6.3(b)(i)), with the other features appearing in the characterizing part (PCT Rule 6.3(b)(ii)).